

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 13		
2. MODIFICATION NO.: 0009		3. EFFECTIVE DATE FEB 04, 2003		4. REQUISITION/PURCHASE REQ. NO. W81W3G-2035-7181		PROJECT NO. (If applicable)	
6. ISSUED BY Department of the Army Baltimore District, Corps of Engineers Contracting Division P.O. Box 1715 Baltimore MD 21203-1715		CODE CA31		7. ADMINISTERED BY: Contracting Division, Contracts Branch CENAB-CT-C 10 S. Howard ST. Room 7000 Baltimore, MD 21203-1715		CODE E1P0100	
8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code)				(x)		9A. AMENDMENT OF SOLICITATION NO. DACW31-02-R-0044	
				X		9B. DATED (SEE ITEM 11) NOV 12, 2002	
						10A. MODIFICATION OF CONTRACT/ ORDER NO.	
						10B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

	The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers is not extended.	
	DATE OF RECEIPT OF PROPOSALS 4:00 PM, LOCAL TIME, FEB 06, 2003	

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

**13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS,
IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.**

	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER No. ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR43.103(b)
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: changes clause FAR 52.243.1
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor is not, is required to sign this document and return copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

**BELL/LINCOLN MULTICULTURAL SCHOOL MODERNIZATION
WASHINGTON, DC**

SEE THE FOLLOWING PAGES

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR _____ (signature of person authorized to sign)		16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)	
15C. DATE SIGNED		16C. DATE SIGNED	

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

AMENDMENTS:

DRAWINGS (where Amendment 0001 is cited, this refers to total reissuance of all the drawings; reference to Amendment 0008 on attached drawings should be ignored):

- 1) AMENDMENT 0001, Sheets G101, G102, G103, G104 & G105:
All walls to be built to the under side of the deck above.
- 2) AMENDMENT 0001, Sheet G-302: Wall to Deck Details:
Delete this sheet as issued and therefore substitute the attached revised numbered sheet, dated 28 January 2003.
- 3) AMENDMENT 0001, Sheet AS102: Site Details:
Detail A3/AS102 – Tennis Court Fence: Revise the fence height from 10'-0" to 12'-0".
- 4) AMENDMENT 0001, Sheet AS104: Site Details:
Detail A1/AS104 – Back stop @ softball field: Refer to detail A5/AS104 for all vertical dimensions.
- 5) AMENDMENT 0001, Sheet CG101: Site Plan:
The chain link fencing identified along the property line shall be 8'-0" tall.
- 6) AMENDMENT 0001, Sheet SF601: Typical Floor Framing Details:
Detail D5/SF601: The elevated slab thickness is to be 5 inches as identified in the detail.
- 7) AMENDMENT 0001, Sheet SB501: Foundation Details:
The mud slab is required. The mud slab is to be a minimum of 2 ½" thick reinforced with #3 bars @ 12" o.c. each way. Refer to drawing SB103 for typical slab detail note.
- 8) AMENDMENT 0001, Sheet SR103: Roof Framing Plan Area "C":
 - A. Roof joists between column lines "G" and "Q" from column line "41" to "44" shall be 12K3 joists.
 - B. Roof joists between column lines "G" and "Q" from column line "44" to "48" shall be 20K3 joists.
- 9) AMENDMENT 0001, Sheet SR502: Roof Details:
 - A. Detail A2/SR502: Revise the steel beam from a W8x24 to a W8x28.
 - B. Detail A4/SR502: Revise the steel beam from a W8x24 to a W8x28.
 - C. Detail A5/SR502: Revise the steel beam from a W8x24 to a W8x28.
- 10) AMENDMENT 0001, Sheet AP106: First Floor Plan Area – "D":

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

Vestibule D101: Provide and install a 6'-4" x 10'-0" recessed walk-off mat. Refer to detail A2/AE304.

- 11) AMENDMENT 0001, Sheet AP409: Door Frames
 - A. Glazing schedule: The symbol identified by the combination of a black circle and white circle shall represent: "Clear low "E" insulated annealed glass". Omit the reference to "tempered".
 - B. Door Types: The minimum STC rating for doors "AD" & "ADF" will be STC 42.
- 12) AMENDMENT 0001, Sheet AP504: Plan Details

Detail B4A/AP504 and B4C/AP504: When face brick is used as a column wrap, delete the requirement for bull nose corners.
- 13) AMENDMENT 0001, Sheet AP506: Cast Stone Shapes Plan Details

Delete this sheet as issued and therefore substitute the attached revised numbered sheet, dated 28 January 2003.
- 14) AMENDMENT 0001, Sheet AE201: Exterior Elevations

Delete this sheet as issued and therefore substitute the attached revised numbered sheet, dated 28 January 2003.
- 15) AMENDMENT 0001, Sheet AE202: Exterior Elevations

Delete this sheet as issued and therefore substitute the attached revised numbered sheet, dated 28 January 2003.
- 16) AMENDMENT 0001, Sheet AE501: Built Up Roof Typical Details

Delete details C4/AE501 & B4/AE501.
- 17) AMENDMENT 0001, Sheet AF601: Color Schedule & Notes
 - A. The exterior brick paver as found in the color schedule has been identified with the symbol "BP". Hanover (Classics) and Pave Stone have both been identified as approved manufacturers of this product. The General Contractor and/or mason may use either of these products and color for the exterior brick paver. There will be only one manufacturer and color selected.
- 18) AMENDMENT 0004, Item 18, Sheet AF602: Room Finish Schedule
 - A. Rooms B118 & B128 have been identified with a carpet and wood floor finish. The carpet shall be installed on the treads & risers of the stairs. The wood floor finish shall be installed on the landing and between the stair landing and the adjacent stage.

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

- B. Rooms B114 & B115 have been identified to have exposed concrete and a carpet floor finish. The floor area beneath the fixed seating shall be exposed concrete. Carpet shall be installed every where else.
- 19) AMENDMENT 0004, Item 19, Sheet AF603: Room Finish Schedule
Room D123: Revise the floor finish to be "RF" – Rubber Floor Tile.
- 20) AMENDMENT 0001, Sheet AI104B: Furniture & Equipment First Floor Plan Area-"B" Option: Rooms B123 & B124 shall have the same equipment as identified for these rooms on drawing AI104A.
- 21) AMENDMENT 0001, Sheet AI108: Furniture & Equipment Second Floor Plan Area - "A"
Distance Learning A218, provide and install a manually operated 80"x72" projection screen.
- 22) AMENDMENT 0001, Sheets AI101 through AI115
 - A. These drawings identify all architectural case work that is to be included in the base bid.
 - B. Drawings AI202 through AI205 are to be considered for reference only.
- 23) AMENDMENT 0001, Sheet AI111: Furniture & Equipment Second Floor Plan Area – "D"
Gym D237, add shot clocks-2 (with goal lights and horn) adjacent to each score board.
- 24) Amendment 0001, Sheet CU101: In Region B-1 of Sheet CU101, changed "PROP. 4" GAS" to "PROP. 6" GAS", calling out the gas line size feeding the building.
- 25) AMENDMENT 0004, Item 85, Sheet EP101: Parking Garage Area "D" – Elec. Power
 - A. Delete 7' X 7' X 3' box in the garage in section D. Provide (2) – 4'-6" X 4'-6" X 18" boxes mounted to the structure. Boxes will be mounted between the ceiling and the bottom of the concrete joists. Install boxes staggered, as in section E. Mount boxes so the lowest portion of the box maintains 8' above the floor slab. Run conduits above the plane of the ceiling within the 12" ceiling space between the gypsum and concrete joists.
 - B. Conduits will be run as a two tier system but maintain hidden in the ceiling space. Mount conduit trapeze supports so the lowest position of the all-thread is ½" above the gypsum ceiling.

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

- 26) AMENDMENT 0004, Item 86, Sheet EP102: Parking Garage Area “E” – Elec. Power
 A. Delete 14’ X 14’ X 3’ box in the garage in section E. Provide (4) – 4’-6” X 4’-6” X 18” boxes mounted to the structure. Boxes will be mounted between the ceiling and the bottom of the concrete joists. Install boxes staggered to allow the entrance of conduit from the main electrical room. Mount boxes so the lowest portion of the box maintains 8’ above the floor slab. Run conduits above the plane of the ceiling within the 12” ceiling space between the gypsum and concrete joists.
 B. Conduits will be run as a two tier system but maintain hidden in the ceiling space. Mount conduit trapeze supports so the lowest position of the all-thread is ½” above the gypsum ceiling.
- 27) AMENDMENT 0004, Item 137: Specification Section 01050, Page 5, Paragraph 1.15 and Item 137: Delete paragraph 1.15 that has been referenced in each document and substitute the following:

 “1.15 HAZARDOUS MATERIALS – EXISTING BELL HIGH SCHOOL AND EXISTING LINCOLN MIDDLE SCHOOL
 The removal of hazardous materials has been/will be completed under separate contracts with the Government. It is the intent of those contracts to remove all hazardous materials from both buildings prior to the beginning of the demolition for each building by the General Contractor such that demolition can be accomplished without any further abatement.
- 28) Amendment 0004, Item #35, Sheet MH106: Add the following to the end of Drawing Note 19: (SYSTEM NOT IN CONTRACT).
- 29) Amendment 0004, Item #42, Sheet MH112: Remove Drawing Note 14 and replace with: 5” DIA DRYER EXHAUST DUCT UP TO GEF-9 ON ROOF.
- 30) Amendment 0004, Item #43, Sheet MH113: Remove Drawing Note 11 and replace with: NOT USED.
- 31) Amendment 0004, Item #45, Sheet MH115: Remove Drawing Note 22 and replace with: 12x14 KILN EXHAUST DUCT UP TO GEF-7 ON ROOF.
- 32) Amendment 0004, Item #55, Sheet MH604: HIGH SCHOOL EXHAUST FAN SCHEDULE, MIDDLE SCHOOL EXHAUST FAN SCHEDULE & GENERAL EXHAUST FAN SCHEDULE: Removed fan “TYPE” and replaced with identifying type which matches the specifications. See SK-M-001 for modified entries.

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

- 33) Amendment 0004, Item #64, Sheet PL106: Add the following to the end of Compressed Air System Note: (COMPRESSED AIR SYSTEM NOT IN CONTRACT).
- 34) Amendment 0004, Item #88, Sheet EP104: Add conduit wire and controller for Counter Shutter Motor for door B106B. Connect to existing Counter Shutter Motor B105B.
- 35) Amendment 0004, Item #91, Sheet EP106: Change Motorized Screen to Folding Panel Door D147D.
- 36) Amendment 0001, Sheet EP109: Provide conduit and wire for Overhead Door B202B. Provide controller located in B202 control room. Use circuit RP21-27.
- 37) Amendment 0004, Item #132, Sheet TY106: Mount wall mounted speakers in student dining area 12'-0" above finished floor.
- 38) Amendment 0004, Item #132, Sheet TY106: Student Dining Reinforcement System is the same as the Cafeteria Sound System.
- 39) Amendment 0004, Item 158, SECTION 12627 – LIBRARY FURNITURE:
Page 12627-2, line 47: Species of hardwood shall be red oak.
- 40) Amendment 0004, Item 161, SECTION 15854: Remove title of the specification section and replace with: WELDING EXHAUST SYSTEM (NOT IN CONTRACT).
- 41) Amendment 0001, Sheet TY107: Mount wall mounted speakers in Choir and Band Hall 10'-0" above finished floor or 1'-0" below ceiling whichever is lower. Provide 2 ceiling mounted microphone outlets equally spaced, centered and parallel to the front of the classroom.
- 42) Amendment 0001, Sheet TY111: Change Music Room Amplifier to Gymnasium Amplifier located in storage room D229.
- 43) Amendment 0001, Sheet TY111: Mount wall mounted speakers in gymnasium 22'-0" above finished floor.
- 44) Amendment 0004, Item #87, Sheet EP103; Item #60, EP104; Item #62, EP105; Item #63, EP106; Item #64, EP107; and Item #86, EP615: Provide junction box, 2 #12 and 1 #12 GND wire in 3/4" conduit and 2 #12 wire in 1/2" conduit to FACP for each of the following doors.
 - A. Door A100A and A100B to circuit ERP21-17,
 - B. Door A101A and A101A to circuit ERP21-19,

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

- C. Door B101A and B101B to circuit ERP21-8,
- D. Door B102A and B102B to circuit ERP21-10,
- E. Door A173 and A167 to circuit ERP21-12,
- F. Door E130A and E130B to circuit ERP21-14,
- G. Door E130C to circuit ERP21-16,
- H. Door E101A and E101B to circuit ERP21-18,
- I. Door E102A and E102B to circuit ERP21-20,
- J. Door E101C and E102C to circuit ERP21-22,
- K. Door C100A and C100B to circuit ERP22-6,
- L. Door C101A and C101B to circuit ERP22-8,
- M. Door C155 and C157 to circuit ERP22-10,
- N. Door D101A and D101B to circuit ERP22-12,
- O. Door D102A and D102B to circuit ERP22-14,
- P. Door D101C and D102C to circuit ERP22-16.

- 45) Amendment 0007, Item 21: Delete the specification table of contents and substitute therefore the attached revised table of contents, dated January 28, 2003.

SPECIFICATIONS:

- 46) SECTION 01510 – TEMPORARY CONSTRUCTION ITEMS:
- A. Page 01510-2, line 55, revise the floor area of the trailer from 1500 to 2000 to 2,000 square feet.
 - B. Page 01510-3, line 15: paragraph 1.7.1.3 Equipment; revise to read as follows;
 - a. One (1) drafting table with two stools.
 - b. One (1) plan rack.
 - c. Seven (7) new four-drawer lockable file cabinets
 - d. Seven (7) non-inclusive desks.
 - e. One (1) conference table or combination of tables suitable for ten personnel.
 - f. Seven (7) wheeled desk chairs
 - g. Ten (10) folding chairs.
 - h. Seven (7) telephones
 - C. Page 01510-3, line 53, paragraph 1.7.1.7 Automated Information Items, revise to read as follows;
 - a. Seven Desktop computers (PC) - Pentium 4, 1.8 + GHZ processor, 5126 MB memory with modem with Windows 2000 Professional OS
 - b. Seven PC Monitor - 21 inch screen.
 - c. Seven internal PC Modem - 56 kps or greater.
 - d. Seven PC Storage - 40 GB hard drive.
 - e. Seven Internal PC-CD-Rom Writer.

AMEMDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

- f. Seven PC Software - Microsoft Office 2000 Professional, Seven AutoCAD 2000 or other AutoCAD viewer/printer.
 - g. Two Personal Digital Assistant (PDA) Pocket PC or Palm Pilot with email, spreadsheet, word processing software and voice recognition. PDA capable to connect with the PC.
 - h. One Network Capable Printer – Inkjet, 11 pages per minute capable of 11”x 17” and 2400 x 1200 dpi.
 - i. One Digital Camera - 1280 x 960 resolution.
 - j. Temporary Office – The office shall be networked with Category 5 cable to allow all work stations and printers to communicate with each other. Location of connection points to be designated by the contracting officer. Network will allow for expansion up to connecting 14 devices. Final termination point to allow for DSL or fractional T1 external connection to Internet provided by the Contractor.
- 47) SECTION 01210 – ALLOWANCE FOR UTILITY CONNECTION FEES: Add this section to the specification.
- 48) SECTION 02780 – UNIT PAVERS:
- A. Unit Paver: page 02780-2, line 22; the paver size can be 4”x8”x3” or as specified...
 - B. The face of these pavers will have engraving added to them prior to the installation. The engraving and the handling of the paver will be paid for by others.
- 49) SECTION 02794 – EXTERIOR ATHLETIC EQUIPMENT:
- A. Football benches: Page 02794-2, line 31, delete the reference to football benches.
 - B. Base ball benches: Page 02794-2, line 31, delete the reference to baseball benches.
 - C. Softball benches: Page 02794-2, line 31, provide portable benches for both the home and visit teams.
- 50) SECTION 02821 – CHAIN-LINK FENCES AND GATES:
Page 02821-7, line 7, delete the reference to “Automatic Gate Operator”.
- 51) SECTION 02842 – BICYCLE RACKS:
Page 02842-1, line 15; add the following manufacturer “Creative Pipe, Inc.” as an approved manufacturer for bicycle racks.
- 52) SECTION 04810 – UNIT MASONRY ASSEMBLIES:
Page 04810-7, line 37; delete the reference to “Austenitic Stainless Steel”.

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

- 53) SECTION 08520 – ALUMINUM WINDOWS:
Page 08520-3, line 27; Revise this line to read: “Double Hung: Traco; TR-5700 (H-C50 heavy commercial) with a minimum of a STC rating of 40.
- 54) SECTION 07131 – SELF-ADHERING SHEET WATERPROOFING:
Page 07131-1, line 18, revise to read as follows: HDPE sheet waterproofing at horizontal (between slab and mud slab) and vertical applications
- 55) SECTION 07511 – BUILT-UP ASPHALT ROOFING:
Page 07511-3, line 56; add the following manufacturer “U.S. Intec” as an approved manufacturer.
- 56) SECTION 09511 – ACOUSTICAL WALL PANELS
Page 09521-3, line 41; add the following manufacturer “Acoustical Resources, Inc.” as an approved manufacturer.
- 57) SECTION 09521 – ACOUSTICAL PANEL CEILINGS
Page 09511-5, line 10; APC4, add the following manufacturer “Acoustical Resources, Inc.” as an approved manufacturer.
- 58) SECTION 10505 – METAL LOCKERS:
A. Wardrobe (student) lockers shall have a recessed handle and latch, as identified, however the locking device shall be a combination lock with a master key.
B. Athletic lockers shall have a recessed handle and latch with a strike and eye for a padlock.
- 59) SECTION 11110 – COMMERCIAL LAUNDRY EQUIPMENT:
Page 11110-1, line 57, add the following manufacturer “Continental” as an approved manufacturer for commercial laundry equipment.
- 60) SECTION 11133 – TELEVISION MONITOR MOUNT:
Refer to detail D5/AI106 for information on the TV Bracket detail.
- 61) SECTION 11400 – FOOD SERVICE EQUIPMENT:
Page 11400-20, 3.06 Equipment Schedule:
A. Item #2: Utility Cart, Mobile, add the following manufacturers “Caddy Corporation and Sevolift/Eastern” as an approved manufacturers for the utility cart – mobile.
B. Item #3: Shelving, add the following manufacturers “Metal Masters and Universal” as an approved manufacturers for shelving.
C. Item #4: Dunnage Rack, add the following manufacturers “Metal Masters and Universal” as an approved manufacturers for dunnage racks.

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

- D. Item #5: Walk-in Cooler/Freezer, add the following manufacturers "W.A. Brown & Son and Kolpak" as an approved manufacturers for walk-in cooler/freezer.
- E. Item #6: Freezer Refrigeration System, add the following manufacturers "RDT and Kairak" as an approved manufacturers for the freezer refrigeration system.
- F. Item #7: Cooler Refrigeration System, add the following manufacturers "RDT and Kairak" as an approved manufacturers for the cooler refrigeration system.
- G. Item #8: Shelving, mobile add the following manufacturers "Metal Masters and Universal" as an approved manufacturers for mobile shelving.
- H. Item #9: Dunnage Rack, Mobile add the following manufacturers "Metal Masters and Universal" as an approved manufacturers for mobile dunnage racks.
- I. Item #11: Hand Sink, add the following manufacturers "Avance/Tabco and Krowne" as an approved manufacturers for hand sinks.
- J. Item #12: Soap & Towel Dispenser, add the following manufacturers "Avance/Tabco and Krowne" as an approved manufacturers for soap & towel dispensers.
- K. Item #13: Disposer, add the following manufacturers "Waste King and Salvajor" as an approved manufacturers for disposers.
- L. Item #15: Food Processor, add the following manufacturers "Hobart and General Slicing" as an approved manufacturers for food processors.
- M. Item #17: Slicer, add the following manufacturers "Berkel and Globe" as an approved manufacturers for slicers.
- N. Item #19: Ingredient Bin, Mobile, add the following manufacturers "Cambro and Continental Plastics" as an approved manufacturers for mobile ingredient bins.
- O. Item #22: Mixer, 60-Quart, add the following manufacturers "Varimixer and Univex" as an approved manufacturers for mixers
- P. Item #23: Pot & Pan Shelving, add the following manufacturers "Metal Masters and Universal" as an approved manufacturers for pots and pan shelving.
- Q. Item #25: Disposer, add the following manufacturers "Waste King and Salvajor" as an approved manufacturers for disposers.
- R. Item #26: Mop Sink & Rack, add the following manufacturers "Advance/Tabco and IMC Teddy" as an approved manufacturers for mop sinks & racks.
- S. Item #27: Utility Raceway, add the following manufacturers "Avtec and Gaylord" as an approved manufacturers for utility raceways.
- T. Item #28: Ventilator, add the following manufacturers "Avtec and Gaylord" as an approved manufacturers for ventilators.

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

- U. Item #29: Fire Protection System, add the following manufacturers “Kidde and Pyro-Chem” as an approved manufacturers for fire protection system.
- V. Item #30: Ice Machine, add the following manufacturers “Ice-O-Matic and Scottsman” as an approved manufacturers for ice machines.
- W. Item #33: Convection Oven, Mobile, add the following manufacturers “Blogett and Vulcan” as an approved manufacturers for convection ovens.
- X. Item #34: Griddle, Mobile, add the following manufacturers “Blogett and Vulcan” as an approved manufacturers for mobile griddles.
- Y. Item #35: Fryer Assembly, Mobile, add the following manufacturers “Pitco and Vulcan” as an approved manufacturers for fryers.
- Z. Item #36: Tilting Kettle, 30-Gallon, add the following manufacturers “Groen and Vulcan” as an approved manufacturers for kettles.
- AA. Item #37: Floor Trough, add the following manufacturers “Kevry and Universal” as an approved manufacturers for floor troughs.
- BB. Item #38: Convection Steamer, add the following manufacturers “Groen and Vulcan” as an approved manufacturers for convection steamers.
- CC. Item #39: Pan Rack Cart, Mobile, add the following manufacturers “InterMetro and Metal Washers” as an approved manufacturers for pan rack carts.
- DD. Item #44: Pass-Thru Refrigerator, add the following manufacturers “True and Delfied” as an approved manufacturers for pass-thru refrigerators.
- EE. Item #45: Pass-Thru Warming Cabinet, add the following manufacturers “True and Delfied” as an approved manufacturers for pass-thru warming cabinet.
- FF. Item #46: Reach-in Refrigerator, Mobile add the following manufacturers “True and Delfied” as an approved manufacturers for reach-in refrigerators.
- GG. Item #47: Milk Cooler, mobile, add the following manufacturers “True and Delfied” as an approved manufacturers for milk coolers.
- HH. Item #48: Serving Counter, add the following manufacturers “Low Temp by Colorpoint and Piper Products” as an approved manufacturers for serving counters
- II. Item #50: Heated Cabinet, Mobile, add the following manufacturers “InterMetro and Wilder” as an approved manufacturers for mobile heated cabinets.
- JJ. Item #51: Milk Cooler, mobile, add the following manufacturers “True and Delfied” as an approved manufacturers for milk coolers.
- KK. Item #52: Serving Counter, add the following manufacturers “Low Temp by Colorpoint and Piper Products” as an approved manufacturers for serving counters
- LL. Item #54: Condiment Counter, Mobile, add the following manufacturers “Low Temp by Colorpoint and Piper Products” as an approved manufacturers for condiment counters.

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

- MM. Item #55: Flatware Dispenser, add the following manufacturers “Steril-Sil and Vollrath” as an approved manufacturers for flatware dispenser.
 - NN. Item #56: Napkin Dispenser, add the following manufacturers “Dispense-Rite and Modular” as an approved manufacturers for serving counters
 - OO. Item #57: Serving Counter, add the following manufacturers “Laurence” as an approved manufacturers for serving counters
 - PP. Item #58: Tray Caddy, Mobile, add the following manufacturers “Servolift/Eastern and Piper Products” as an approved manufacturers for tray caddy.
 - QQ. Equipment Schedule: Provide equipment quantities per the equipment schedule located on drawing QF101.
- 62) SECTION 11484 – BASKETBALL BACKSTOPS:
Page 11484-1, line 52; add the following manufacturer “ADP LEMCO INC. as an approved manufacturer for basket ball back stops.
- 63) SECTION 11490 – ATHLETIC EQUIPMENT:
- A. Page 11490-2, line 19, add the following manufacturer “Shelled” as an approved manufacturer for volley ball equipment.
 - B. Page 11490-2, line 39, add the following manufacturer “Shelled” as a manufacturer for tennis equipment.
 - C. Page 11490-3, line 53; add the following manufacturer “Atonics” as an approved manufacturer for score boards and shot clocks.
 - D. Wall Attached Horizontal Bar: page 11490-3, line 7; delete this item from the project specifications.
 - E. Wall Chinning Bar: page 11490-3, line 12; delete this item from the project specifications.
 - F. Ballet Bare: page 11490-3, line 29; delete this item from the project specifications.
 - G. Gymnasium Divider Curtain: page 11490-3, line 38; delete this item from the project specifications.
 - H. Shot Clocks: page 11490-4, line 1; provide and install two shot clocks (with goal lights and horn) adjacent to the score boards.
- 64) SECTION 12304 – PLASTIC LAMINATE FACED CASEWORK:
Page 12304-3, line 2; add the following manufacturer “Paragon Casework of Chantilly, Virginia (paragoncasework@aol.com) and Mastercraft Woodworking Company, Inc.as an approved manufacturers.
- 65) SECTION 12326 – MUSIC INSTRUMENT STORAGE CABINETS:
Page 12326-3, line 33; Delete the reference to wood doors. Each compartment of each cabinet shall be supplied with a grille door and a locking slide bolt.
- 66) SECTION 12710 – AUDITORIUM AND THEATER SEATING:

AMENDMENT NO. 0009 TO ADVERTISED RFP DACW31-02-R-0044
EFFECTIVE FEB 04, 2003

- A. All seats will be provided with tablet arms and ADA transfer arms.
 - B. Isle lights: The isle lights (52) shall be provided by the seating manufacturer and located in the isle standard. Refer to the electrical lighting drawing EL104B for the approximate locations of the lights. Final location shall be determined during shop drawing review.
- 67) SECTION 15075: Clarification to RFI No. 37 dated Jan 27, 2003 – Piping shall be identified per specification section 15075. Specification section 09900 covers any special piping systems which requires the pipe to be painted and which color is to be used.
- 68) SECTION 15412 – EMERGENCY PLUMBING FIXTURES: Add this section to the specification.
- 69) DIVISION 17 – IT PERFORMANCE:
- A. General information: Division 17 includes specifications for voice, video and data infrastructure. The associated drawings are the “IT” series (IT1-3-IT120 and IT201-IT215).
 - B. Room C210 is the TDC, however, this school does not have a typical topology.
Room A210 also functions as a Main Distribution Frame for the high school while C210 functions as the Main Distribution frame for the middle school.
 - C. RE4X is part of the scope of work. The top of the ReBox is to be mounted flush with the drop ceiling. The symbol for this is on the drawings is “F”. Only 6-strand multimode fiber is to be terminated in the ReBox.

ATTACHMENTS:

Specifications:

TABLE OF CONTENTS

SECTION 01210	ALLOWANCE FOR UTILITY CONNECTION FEES
SECTION 15412	EMERGENCY PLUMBING FIXTURES

Drawings:

G-302	Wall to Deck Details
AP506	Cast Stone Shapes Plan Details
AE201	Exterior Elevations
AE202	Exterior Elevations

Sketches:

SK-M-001	(Dated 02/03/2003)
----------	--------------------

SECTION 00003 - TABLE OF CONTENTS OF THE CONSTRUCTION DOCUMENTS

PROJECT MANUAL – VOLUME ONE

DIVISION 1 - GENERAL REQUIREMENTS

01000	Administrative Requirements
01020	Pre-Construction and Coordination Conferences
01021	Progress Meetings
01030	Options
01050	Job Conditions
01050A	Geotechnical Report
01050B	Risk Assessment Form
01060	Safety
01060A	Security Log
01060B	Safety Sign
01200	Warranty Requirement
01210	Allowance for Utility Connection Fees
01312	Resident Management System (RMS)
01312A	Quality Control System (QCS)
01320	Project Schedule
01330	Submittal Procedures
01330A	Submittal Register
01451	Contractor Quality Control
01451A	Construction Quality Control Report
01460	Security
01510	Temporary Construction Items
01510A	Safety Sign
01520	Photographic Documentation
01561	Environmental Protection
01572	Construction and Demolition Waste Management
01670	Recycled/Recovered Materials
01720	As-Built Drawings - CADD
01720A	Record Drawing As-Built

DIVISION 2 - SITE CONSTRUCTION

02080	Piped Utilities – Basic Materials and Methods
02100	Soil Erosion and Sediment Control
02122	Protection Trimming
02200	Earthwork (Building)
02221	Building Demolition
02230	Site Clearing
02240	Dewatering
02260	Excavation Support and Protection
02361	Termite Control
02510	Water Distribution
02530	Sanitary Sewerage
02541	Portland Cement Concrete Tennis Court Surfacing
02577	Pavement Marking
02584	Underground Ducts and Utility Structures
02620	Subdrainage
02700	Storm Drainage System
02741	Hot-Mix Asphalt Paving
02751	Cement Concrete Pavement
02780	Unit Pavers
02792	Tennis Court Surface
02793	Baseball and Softball Infields
02794	Exterior Athletic Equipment
02810	Irrigation System
02821	Chainlink Fencing
02832	Premanufactured steel fencing

02840	Traffic Signage
02842	Bicycle Racks
02900	Landscaping

DIVISION 3 – CONCRETE

03051	Cold Weather Concrete
03300	Cast-in-place Concrete
03365	Post Tension Concrete
03450	Plant-Precast Architectural Concrete
03600	Nonshrink Grout

DIVISION 4 – MASONRY

04230	Reinforced Unit Masonry
04720	Cast Stone
04810	Unit Masonry Assemblies
04815	Glass Unit Masonry Assemblies

DIVISION 5 – METALS

05120	Structural Steel
05210	Steel Joists And Joist Girders
05310	Steel Roof Decking
05320	Steel Floor Decking
05400	Cold Formed Metal Framing
05500	Metal Fabrications
05521	Pipe And Tube Railings
05530	Gratings
05580	Formed Metal Fabrications
05811	Pre-manufactured Expansion Joint Systems

DIVISION 6 - WOOD AND PLASTICS

06100	Rough Carpentry
06402	Interior Architectural Woodwork

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

07131	Self-Adhering Sheet Waterproofing
07160	Bituminous Dampproofing
07210	Building Insulation
07411	Manufactured Roof Panels
07412	Manufactured Wall Panels
07511	Built-up Asphalt Roofing
07620	Sheet Metal Flashing, Trim, and Accessories
07716	Roof Expansion Assemblies
07720	Roof Accessories
07730	Rooftop Equipment Supports
07811	Sprayed Fire-Resistive Material
07812	Duct Blanket Fire Protection
07841	Through penetration Fire stop Systems
07842	Fire resistive Joint Systems
07900	Joint Sealers

DIVISION 8 - DOORS AND WINDOWS

08110	Steel Doors and Frames
08163	Sliding Aluminum Framed Glass Frames
08211	Flush Wood Doors
08255	Packaged Steel Door Assemblies
08330	Interior Overhead Coiling Counter Doors
08333	Overhead Coiling Doors (automatic resetting)
08334	Overhead Coiling Grille(Parking Garage)
08335	Self-Opening Security Grille

08347	Wood sound control doors
08410	Aluminum Entrances And Storefronts
08520	Aluminum Windows
08710	Finish Hardware
08716	Power Door Operators
08800	Glass And Glazing
08814	Mirrored Glass
08840	Plastic Glazing

DIVISION 9 – FINISHES

09220	Portland Cement Plaster
09253	Gypsum Sheathing
09260	Gypsum Board Assemblies
09265	Gypsum Board Shaft Assemblies
09310	Ceramic Tile
09400	Terrazzo (thin set)
09450	Flexible Terrazzo Tile (Fritz Tile)
09511	Acoustical Panel Ceilings
09521	Acoustical Wall Panels
09522	Cementitious Wood Fiber Wall Panels
09622	Resilient Athletic Flooring
09640	Wood Flooring - Stage
09644	Wood Athletic Flooring Assemblies - Gym
09651	Resilient Floor Tile
09653	Resilient Wall Base And Accessories
09680	Carpet
09900	Painting
09960	High Performance Coatings

PROJECT MANUAL – VOLUME TWO

DIVISION 10 – SPECIALTIES

10100	Visual Display Boards
10155	Toilet Compartments
10190	Cubicles
10200	Louvers and Vents
10265	Impact Resistant Wall
10350	Flagpoles
10425	Signs
10505	Metal Lockers
10520	Fire Protection Specialties
10652	Folding Panel Partitions
10675	Metal Storage Shelving
10800	Toilet and Bath Accessories
10802	Diaper Changing Station

DIVISION 11 – EQUIPMENT

11026	Safes
11063	Performance Rigging Systems
11110	Commercial Laundry Equipment
11132	Projection Screens
11133	Television Monitor Mount
11136	Language Laboratory Equipment
11150	Parking Control Equipment
11160	Loading Dock Equipment
11194	Salon Furnishings
11400	Foodservice Equipment
11451	Residential Appliances
11484	Basketball Backstops
11490	Athletic Equipment
11610	Laboratory Fume Hoods

11620 Audio Visual Equipment
DIVISION 12 – FURNISHINGS

12304	Plastic Laminate Faced Casework
12326	Musical Storage Cabinets
12345	Laboratory Casework And Fixtures
12494	Roller Shades
12627	Library Furniture
12690	Floor Mats and Frames
12710	Auditorium And Theater Seating
12760	Telescoping Stands

DIVISION 13 - SPECIAL CONSTRUCTION

13100	Lighting Protection
13810	Clock Control
13851	Fire Alarm
13915	Fire – Suppression Piping
13921	Electric – Drive, Centrifugal Fire Pumps

DIVISION 14 - CONVEYING SYSTEMS

14210	Electric Traction Elevators
14700	Turntables

DIVISION 15 – MECHANICAL

15050	Basic Mechanical Material and Methods
15055	Motors
15060	Hangers and Supports
15071	Mechanical Vibration Controls
15075	Mechanical Identification
15081	Duct Insulation
15082	Equipment Insulation
15083	Pipe Insulation
15110	Valves
15121	Pipe Expansion Fittings and Loops
15122	Meters and Gates
15140	Domestic Water Piping
15150	Sanitary Waste and Vent Piping
15160	Storm Drainage Piping
15181	Hydronic Piping
15183	Refrigerant Piping
15185	Hydronic Pumps
15189	HVAC Water Treatment
15191	Fuel Oil Piping
15194	Fuel Gas Piping
15221	Acid – Waste Piping
15410	Plumbing Fixtures
15415	Drinking Fountains and Water Coolers
15430	Plumbing Specialties
15446	Sump Pumps
15450	Fuel Oil Storage Tank
15486	Fuel-Fired, Domestic Water Heaters
15512	Cast – Iron Boilers
15550	Breechings, Chimneys and Stacks
15640	Packaged Cooling Towers
15671	Condensing Units
15672	Air – Cooled Glycol Dry Cooler
15700	Variable Frequency Drive
15710	Heat Exchangers
15726	Custom In Door Air – Handling Units
15732	Rooftop Air Conditioners
15738	Split – System Air – Conditioning Units
15745	Water-Source Heat Pumps

15766	Cabinet Unit Heaters
15767	Propeller Unit Heaters
15775	Electric Heating Cables
15815	Metal Ducts
15820	Duct Accessories
15838	Power Ventilators
15840	Air Terminal Units
15852	Dust Collection System
15854	Welding Exhaust System (Not in Contract)
15855	Diffusers, Registers and Grilles
15900	HVAC Instrumentation and Controls
15940	Sequence of Operations
15949	Building Automation System (BAS) General
15950	Testing, Adjusting and Balancing
15951	BAS Basic Materials, Interface Devices, and Sensors
15952	BAS Operator Interfaces
15953	BAS Field Panels
15954	BAS Communication Devices
15955	BAS Software and Programming
15958	Sequence of Operation
15959	BAS System Commissioning
15960	Laundry Exhaust System

DIVISION 16 - ELECTRICAL

16050	Basic Electrical Materials and Methods
16060	Grounding and Bonding
16075	Electrical Identification
16120	Conductors and Cables
16130	Raceways and Boxes
16139	Cable Trays
16140	Wiring Devices
16215	Electrical Power Monitoring
16231	Packaged Engine Generators
16289	Transient Voltage Suppression
16340	Switch Gear
16410	Enclosed Switches and Circuit Breakers
16415	Transfer Switches
16420	Enclosed Controllers
16441	Switchboards
16442	Panel Boards
16443	Motor-Control Centers
16461	Dry-Type Transformers (600 V and Less)
16491	Fuses
16511	Interior Lighting
16526	Sports Lighting
16528	Exterior Flood Lighting for Flags and Signs
16570	Rigging
16580	Performance Equipment Systems - Electrical
16726	Public Address and Music Equipment

DIVISION 17 – IT PERFORMANCE

17000	Project Summary/Overview
17010	Basic Communications Requirements
17030	Administration Requirements
17080	Project Management & Quality Assurance
17090	Technology Documentation
17100	Cable Plant Overview
17110	Communications Equipment Rooms
17130	Interior Communication Pathways
17150	Backbone Cabling Requirements
17160	Horizontal Cabling Requirements
17165	School Specific Communications Network Outlets
17170	Testing, Identification and Administration

17190	Support and Warranty
17210	Switches and Routers
17400	Video Distribution System Overview
17410	Control and Head End Equipment
17470	Testing, Identification and Administration
17490	Support and Warranty

END OF SECTION 00003

SECTION 01210 – ALLOWANCE FOR UTILITY CONNECTION FEES

PART 1 - GENERAL

RELATED DOCUMENTS

Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

SUMMARY

This Section includes administrative and procedural requirements governing the Utility Connection Fee Allowance.

Within 30 days after award of the Contract, submit applications for all utility connections required for the Project. Connections include but are not limited to the following:

1. Water and Sewer.
2. Stormwater Management
3. Electric Service
4. Gas
5. Telephone
6. Cable TV

Notify the Government Contract Representative of the required utility connection fees as soon as they are known.

SUBMITTALS

Submit copies of all applications and related communication with utility companies.

Prior to payment of the subject fees, submit proposals for payment of the fees included in this Allowance in the form specified for Change Orders.

Submit letters, receipts and canceled checks that confirm payment of the required fees.

UTILITY CONNECTION FEE ALLOWANCE

The Utility Connection Fee Allowance includes only the fees required by the various utility companies.

The Utility Connection Fee Allowance does not include incidental labor required to complete applications, make payments, confirm payments and to confirm that appropriate connections have been made. Cost for these activities are to be included in the Base Bid Amount.

The Utility Connection Fee Allowance amount is to be included in the Contractor's Base Bid Amount.

At Project closeout, credit unused amounts remaining in the Utility Connection Fee Allowance to the Owner by Change Order.

PART 2 – PRODUCTS (Not Used)

PART 3 - EXECUTION

SCHEDULE OF ALLOWANCES

Allowance No. 1: Include the sum of two hundred thousand dollars (\$200,000.00) for the payment of Utility Connection Fees required to complete the Project.

The estimated utility connection fees are as follows:

- | | | |
|----|-----------------|-------------|
| 1. | Water and Sewer | \$30,000.00 |
|----|-----------------|-------------|

1	2.	Stormwater Management	\$2,000.00
2	3.	Electric Service	\$90,000.00
3	4.	Gas	\$60,000.00
4	5.	Telephone	\$15,000.00
5	6.	Cable TV	\$3,000.00
6		Total	\$200,000.00

7
8
9 END OF SECTION 07160

SECTION 15412 - EMERGENCY PLUMBING FIXTURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following emergency plumbing fixtures:
 - 1. Combination units.
 - 2. Water-tempering equipment.

1.3 DEFINITIONS

- A. Accessible Fixture: Emergency plumbing fixture that can be approached, entered, and used by people with disabilities.
- B. Plumbed Emergency Plumbing Fixture: Fixture with fixed, potable -water supply.
- C. PVC: Polyvinyl chloride plastic.
- D. Self-Contained Emergency Plumbing Fixture: Fixture with flushing-fluid-solution supply.
- E. Tepid: Approximately 85 deg F temperature.
 - 1. Allowable Variation: Plus or minus 5 deg F.

1.4 SUBMITTALS

- A. Product Data: Include flow rates and capacities; shipping, installed, and operating weights; furnished specialties; and accessories for each product indicated.
- B. Product Certificates: Submit certificates of performance testing specified in "Source Quality Control" Article.
- C. Field Test Reports: Indicate and interpret test results for compliance with performance requirements.
- D. Maintenance Data: For emergency plumbing fixtures to include in maintenance manuals specified in Division 1.

1.5 QUALITY ASSURANCE

- A. ANSI Standard: Comply with ANSI Z358.1, "Emergency Eyewash and Shower Equipment."
- B. Regulatory Requirements: Comply with requirements in ICC A117.1, "Accessible and Usable Buildings and Facilities"; Public Law 90-480, "Architectural Barriers Act"; and Public Law 101-336, "Americans with Disabilities Act"; about plumbing fixtures for people with disabilities.
- C. Regulatory Requirements: Comply with requirements in U.S. Architectural & Transportation Barriers Compliance Board's "Uniform Federal Accessibility Standards (UFAS), 1985-494-187" about plumbing fixtures for people with disabilities.
- D. Regulatory Requirements: Comply with requirements in Public Law 102-486, "Energy Policy Act," about water flow and consumption rates for plumbing fixtures.
- E. NSF Standard: Comply with NSF 61, "Drinking Water System Components--Health Effects," for fixture materials that will be in contact with potable water.

1.6 COORDINATION

- 1. Coordinate roughing-in and final plumbing fixture locations, and verify that fixtures can be installed to comply with original design and referenced standards.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. For fixture descriptions in other Part 2 articles where the subparagraph titles "Available Products" and "Products" introduce a list of manufacturers and their products, the following requirements apply for product selection:
 - 1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the products specified in other Part 2 articles.
 - 2. Products: Subject to compliance with requirements, provide one of the products specified in other Part 2 articles.

2.2 COMBINATION UNITS

- A. Combination Units: Plumbed, accessible, freestanding type with emergency shower and eye/face wash equipment.
 - 1. Products:
 - a. Bradley Corporation.
 - b. Haws Corporation.

- c. Speakman Co.
 - d. Collegedale; Safety Station PF99 - 8324.
- 2. Piping: Galvanized steel
 - a. Unit Supply: NPS 1-1/4 minimum from top.
 - b. Unit Drain: Floor Drain.
- 3. Shower Capacity: Deliver potable water at rate not less than 20 gpm (76 L/min.) for at least 15 minutes.
 - a. Control-Valve Actuator: Pull chain.
 - b. Shower Head: 8-inch (200-mm) minimum diameter, chrome-plated brass or stainless steel.
- 4. Eye/Face Wash Equipment: With capacity to deliver potable water at rate not less than 3.0 gpm (11.4 L/min.) for at least 15 minutes.
 - a. Control-Valve Actuator: Paddle.
 - b. Receptor: stainless-steel bowl.

2.3 WATER-TEMPERING EQUIPMENT

- A. Hot- and Cold-Water-Tempering Equipment: Factory-fabricated equipment including water thermostatic mixing valve designed to provide 85 deg F potable water at emergency plumbing fixtures, to maintain temperature at plus or minus 5 deg F throughout required 15-minute test period, and in case of unit failure to continue cold-water flow, with union connections, controls, corrosion-resistant metal piping, and enclosure.

1. Available Products:

- a. Bradley Corporation.
- b. Haws Corporation
- c. Lawler Manufacturing Co., Inc..
- d. Leonard Valve Co..
- e. Speakman Co..

2.4 SOURCE QUALITY CONTROL

- A. Certify performance of plumbed emergency plumbing fixtures by independent testing agency acceptable to authorities having jurisdiction.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine roughing-in for water piping systems to verify actual locations of piping connections before plumbed emergency plumbing fixture installation. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 EMERGENCY PLUMBING FIXTURE INSTALLATION

- A. Assemble emergency plumbing fixture piping, fittings, control valves, and other components according to manufacturer's written instructions.
- B. Install fixtures level and plumb.
- C. Fasten fixtures to substrate.
- D. Install shutoff valves in water-supply piping to fixtures. Use ball, gate, or globe valve if specific type valve is not indicated. Install valves chained or locked in open position if permitted. Install valves in locations where they can easily be reached for operation. Refer to Division 15 Section "Valves" for general-duty shutoff valves.
 - 1. Exception: Omit shutoff valves on valved supplies to group of plumbing fixtures that includes emergency plumbing fixture.
 - 2. Exception: Omit shutoff valves on supplies to emergency equipment if prohibited by authorities having jurisdiction.
- E. Install shutoff valve and strainer in steam piping and shutoff valve in condensate return piping.
- F. Install dielectric fitting in supply piping to fixture if piping and fixture connections are made of different metals. Refer to Division 15 Section "Basic Mechanical Materials and Methods" for dielectric fittings.
- G. Install escutcheons on piping wall and ceiling penetrations in exposed, finished locations. Refer to Division 15 Section "Basic Mechanical Materials and Methods" for escutcheons.
- H. Fill self-contained fixtures with flushing fluid.

3.3 CONNECTIONS

- A. Piping installation requirements are specified in other Division 15 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Connect hot- and cold-water-supply piping to water-tempering equipment. Connect output from water-tempering equipment to emergency plumbing fixtures.

3.4 FIELD QUALITY CONTROL

- A. Mechanical-Component Testing: After plumbing connections have been made, test for compliance with requirements. Verify ability to achieve indicated capacities and temperatures.
- B. Repair or replace malfunctioning units. Retest as specified above after repairs or replacements are made.
- C. Report test results in writing.

3.5 ADJUSTING

- A. Adjust or replace fixture flow regulators for proper flow.
- B. Adjust equipment temperature settings.

END OF SECTION 15412

MECH SCHOOL EXHAUST FAN SCHEDULE

UNIT #	LOCATION	AREA SERVED	STD. AIR CFM	TOTAL IN WATER	MOTOR HP	MAX FAN RPM	ELECT. CHARG. (V/4/Hz)	TYPE	REMARKS
MSF-1	ROOF AREA C	C139	840	2.00	1/2	3,111	480/3/60	FLUE HOOD EXHAUST FAN	
MSF-2	ROOF AREA C	C141	840	2.00	1/2	3,111	480/3/60	FLUE HOOD EXHAUST FAN	
MSF-3	ROOF AREA C	C227	840	1.90	1/2	3,000	480/3/60	FLUE HOOD EXHAUST FAN	
MSF-4	ROOF AREA C	C228	840	1.80	1/2	3,000	480/3/60	FLUE HOOD EXHAUST FAN	
MSF-5	ROOF AREA C	C323	840	1.50	1/2	2,887	480/3/60	FLUE HOOD EXHAUST FAN	
MSF-6	ROOF AREA D	C325	840	1.50	1/2	2,887	480/3/60	FLUE HOOD EXHAUST FAN	
MSF-7	ROOF AREA D	C139/C140	2,240	0.45	1/2	1,070	480/3/60	CENTRIF. ROOF VENTILATOR, BELT	
MSF-8	ROOF AREA D	C141	1,840	0.45	1/2	1,070	480/3/60	CENTRIF. ROOF VENTILATOR, BELT	
MSF-9	ROOF AREA D	C227/C228	2,240	0.40	1/3	1,045	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	
MSF-10	ROOF AREA D	C229	1,840	0.40	1/3	1,045	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	
MSF-11	ROOF AREA D	C323/C324	2,240	0.30	1/3	900	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	
MSF-12	ROOF AREA D	C325	1,840	0.30	1/3	900	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	
MSF-13	NOT USED								
MSF-14	ROOF AREA C	C324	200	0.30	1/25	3,350	120/1/60	CENTRIF. ROOF VENTILATOR, DIRECT	
MSF-15	ROOF AREA D	D110	780	0.50	1/4	850	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	
MSF-16	ROOF AREA D	D113	780	0.60	1/4	800	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	

- NOTES:**
1. FANS MSF-1 THRU MSF-6 SHOULD BE SELECTED ON OUTLET VELOCITY OF 3300 FPM. SP INCLUDES DISCHARGE PRESSURE LOSS.
2. PROVIDE VARIABLE SPEED CONTROLLER FOR FANS MSF-13 THRU MSF-17.

HIGH SCHOOL EXHAUST FAN SCHEDULE

UNIT #	LOCATION	AREA SERVED	STD. AIR CFM	TOTAL SP IN WATER	MOTOR HP	MAX FAN RPM	ELECT. CHARG. (V/4/Hz)	TYPE	REMARKS
HSEF-1	ROOF AREA A	A180	840	2.10	1.5	3,231	480/3/60	FLUE HOOD EXHAUST FAN	
HSEF-2	ROOF AREA A	A238	840	2.00	1.5	3,111	480/3/60	FLUE HOOD EXHAUST FAN	
HSEF-3	ROOF AREA A	A240	840	2.00	1.0	3,111	480/3/60	FLUE HOOD EXHAUST FAN	
HSEF-4	ROOF AREA A	A237	840	1.80	1.0	3,000	480/3/60	FLUE HOOD EXHAUST FAN	
HSEF-5	ROOF AREA A	A436	840	1.50	1.0	2,887	480/3/60	FLUE HOOD EXHAUST FAN	
HSEF-6	ROOF AREA A	A160/A161	2,240	0.60	1/2	1,086	480/3/60	CENTRIF. ROOF VENTILATOR, BELT	
HSEF-7	ROOF AREA A	A238/A239	2,240	0.45	1/2	1,070	480/3/60	CENTRIF. ROOF VENTILATOR, BELT	
HSEF-8	ROOF AREA A	A240	1,840	0.45	1/3	995	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	
HSEF-9	ROOF AREA A	A337/A338	2,240	0.40	1/3	1,045	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	
HSEF-10	ROOF AREA A	A436/A437	2,240	0.30	1/3	900	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	
HSEF-11	NOT USED								
HSEF-12	ROOF AREA A	A316	300	0.25	1/6	880	120/1/60	CENTRIF. ROOF VENTILATOR, DIRECT	
HSEF-13	NOT USED								
HSEF-14	ROOF AREA A	A214	200	0.25	1/7	885	120/1/60	CENTRIF. ROOF VENTILATOR, DIRECT	
HSEF-15	ROOF AREA A	A338	500	0.25	1/8	870	120/1/60	CENTRIF. ROOF VENTILATOR, DIRECT	

- NOTES:**
1. FANS HSEF-1 THRU HSEF-5 SHOULD BE SELECTED ON OUTLET VELOCITY OF 3300 FPM. SP INCLUDES DISCHARGE PRESSURE LOSS.
2. PROVIDE VARIABLE SPEED CONTROLLER FOR FANS HSEF-11 THRU HSEF-15.

GENERAL EXHAUST FAN SCHEDULE

UNIT #	LOCATION	AREA SERVED	STD. AIR CFM	TOTAL SP IN WATER	MOTOR HP	MAX FAN RPM	ELECT. CHARG. (V/4/Hz)	TYPE	REMARKS
GEF-1	ROOF AREA D	D150, KITCHEN HOOD	8,250	1.80	5	900	480/3/60	CENTRIF. ROOF VENTILATOR, BELT	
GEF-2	ROOF AREA E	CONCESSION	1,680	0.33	1/2	1,200	480/3/60	CENTRIF. ROOF VENTILATOR, BELT	
GEF-3	ROOF AREA B	B108, CONCESSION	160	0.50	1/8	1,003	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	
GEF-4	MECHANICAL ROOM D301	D301, MECHANICAL ROOM	11,200	0.20	3/4	850	480/3/60	PROPELLER, BELT	
GEF-5	MECHANICAL ROOM D302	D302, MECHANICAL ROOM	11,200	0.20	3/4	850	480/3/60	PROPELLER, BELT	
GEF-6	ROOF AREA D	DANCE	80,000	1.50	50	1,725	480/3/60	UTILITY SET	
GEF-7	ROOF AREA A	A317 (KLN)	1,200	0.75	1/2	1,200	480/3/60	CENTRIF. ROOF VENTILATOR, BELT	
GEF-8	ROOF AREA D	D111 (KLN)	1,200	0.75	1/2	1,200	480/3/60	CENTRIF. ROOF VENTILATOR, BELT	
GEF-9	ROOF AREA D	E207 (LAUNDRY)	1,200	1.75	1	2,385	480/3/60	UTILITY SET	
GEF-10	ROOF AREA A	A213 (LAUNDRY)	170	1.75	1/2	1,760	480/3/60	UTILITY SET	
GEF-11	ROOF AREA C	C304B (LAUNDRY)	170	1.75	1/2	1,760	480/3/60	UTILITY SET	
GEF-12	ROOF AREA D	D217 (LAUNDRY)	1,200	1.75	1	2,385	480/3/60	UTILITY SET	
GEF-13	RECEIVING D131	D128/D131/D134	1,000	0.75	1/2	967	480/3/60	IN-LINE CENTRIFUGAL	
GEF-14	ROOF AREA E	E119E (OFFICE)	170	1.75	1/2	1,760	480/3/60	UTILITY SET	
GEF-15	ROOF AREA E	E212, TRAINING	480	0.25	1/4	1,000	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	
GEF-3A	ROOF AREA B	B108, CONCESSION	480	0.33	1/6	1,207	120/1/60	CENTRIF. ROOF VENTILATOR, BELT	

- NOTES:**
1. GEF-3 IS INSTALLED IN THE BASE BD SCENARIO.
2. GEF-3A IS INSTALLED FOR THE ALTERNATE BD SCENARIO.
3. MOTORS FOR FANS GEF-9, 10, 11, 12 & 14 SHALL BE LOCATED OUTSIDE OF THE AIR STREAM.

DRAWN BY: DMC

CHECKED BY: DC

SCALE: NONE

DATE: 02/03/2003

JOB NUMBER

SHEET

DESCRIPTION:
SK-M-001

F-730-48-31

MH604

